



ROCKET **LINX** ES7528

Industrial Managed PoE Plus Switch

Quick Installation Guide



Introduction

The RocketLinX ES7528 is a rack mount high-port density managed PoE switch designed exclusively for highly critical PoE applications such as real-time IP video surveillance with high-resolution quality and evolving wireless communication systems such as Wimax and 802.11 a/b/g/n access points.

The RocketLinX ES7528 provides a total of 28-ports:

- ▶ 24 Fast Ethernet PoE injector ports that can deliver 15.4 Watts (IEEE 802.3af) or 32 Watts (high power PoE IEEE 802.3at)
- ▶ 4 gigabit copper/SPF combo uplink Ethernet ports

See the Control web site for detailed product specifications.

Installation Overview

You can use the following overview to install the RocketLinX ES7528. If you need more detailed information, you can refer to the *RocketLinX ES7528 User Guide*, which contains detailed installation and configuration information.

Connect the Power

The RocketLinX ES7528 is equipped with both AC and DC1/DC2 power inputs. The RocketLinX ES7528 provides redundant or aggregated power inputs (AC and/or DC1/2). DC1 and DC2 inputs support reverse polarity protection. The RocketLinX ES7528 will signal an alarm for loss of power on either DC1 or DC2.

1. Connect the power cord to the AC power input connector.

Note: *To reach the maximum total power budget of 720W, power inputs must be aggregated.*

Refer to the table for detailed information.

2. Connect the DC power inputs.

Note: *Power should be disconnected from the power supply before connecting it to the switch. Otherwise, your screwdriver blade can inadvertently short your terminal connections to the grounded enclosure.*

3. Insert the positive and negative wires (12 to 22 AWG) into the V+ and V- contacts.
4. Tighten the wire-clamp screws to prevent the DC wires from coming loose.

Electrical Specifications		Value	
Power Input Voltage	DC1/DC2	802.3af	48VDC (46-57VDC)
		802.3at	53VDC (50-57VDC)
		AC and DC1/DC2 aggregated	53VDC 8.2A Maximum
		DC1/DC2 aggregated	DC1=DC2†
	PSU/AC power	100-250VAC 47-63Hz 4A Maximum	
PoE Output Voltage	802.3af	44-57VDC	
	802.3at	50-57VDC	
Maximum PoE Power/Port	802.3af	15.4W	
	802.3at	32W	
Power Budget	DC1	400W	
	DC2	400W	
	PSU/AC power	300W	
Total Power Budget	Minimum	Up to 568W	
	Maximum	Up to 720W	
Power Consumption	Maximum	28W without PD load	

† The RocketLinx ES7528 provides redundant or aggregated power inputs, depending on the voltage of the power input. If there are more than two power inputs connected with different voltages, the RocketLinx ES7528 is powered from the highest connected voltage (redundant power). If the voltages of power inputs are the same, the total power output is aggregated.

For example, to reach 700W, you can aggregate the power inputs accordingly:

- AC = 300W and DC1/2 = 400W
- DC1 = 350W and DC2 = 350W

Mount the ES7528

Mount the RocketLinx ES7528 into the rack.

1. Attach the rack mount brackets to the RocketLinx ES7528 by using the screws provided in the rack mount kit.
2. Mount the RocketLinx ES7528 in a 19-inch rack by using the four rack-mounting screws provided in the kit.

Note: When installing multiple switches in high temperature environments, reserve 0.5U-1U of free space between the switches. It is important to disperse the heat generated by the RocketLinx ES7528.

Temperature: Verify that the rack environment temperature conforms to the specified operating temperature range.

Mechanical Loading: Do not place any equipment on top of the switch. In a high vibration environment, additional rack mounting protection is necessary.

Grounding: On the back panel of the RocketLinx ES7528, there is one earth ground screw. Loosen the earth ground screw with a screwdriver; then tighten the screw after earth ground wire is connected. Rack-mounted equipment should be properly grounded.

Connecting Devices

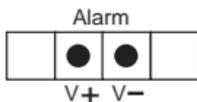
1. Connect standard Ethernet cables between the RocketLinx ES7528 10/100BASE-TX Ethernet port (Auto MDI/MDIX) and the network nodes. Ports 1-24 are 10/100BASE-TX IEEE802.3af (PoE) and IEEE802.3at (PoE Plus) compliant Ethernet ports. Use Category 5 or higher for 802.3at applications. Refer to the *RocketLinx ES7528 User Guide* for detailed information.
2. Connect the appropriate network cables between the RocketLinx ES7528 combo 1000BASE-TX (gigabit, Auto MDI/MDIX)/SFP ports and the network.
3. Optionally, connect SFP transceivers. Comtrol recommends using Comtrol gigabit SFP transceivers.
 - a. Plug the SFP transceiver into the SFP fiber transceiver.
 - b. Connect the transmit channel to the receive channel at each end.
 - c. Check the direction/angle of the fiber transceiver and the fiber cable.

Note: This is a Class 1 Laser/LED product. Do not stare at the Laser/LED Beam. The SFP port does not function until the fiber cable is linked to another active device. The SFP and corresponding RJ45 ports work in an exclusive mode. Traffic sent or received through the SFP module will have priority thus no traffic will be sent or received over the corresponding RJ45 connection. To use the RJ45 connection, remove the corresponding SFP.

Alarm Relay Set-Up

If desired, connect the digital relay input or output. The relay contacts are energized, (open) for normal operation and (close) for fault conditions. The fault conditions include: power failure, Ethernet port link events, and other pre-defined events, which you can configure in the RocketLinX ES7528 user interface.

1. Insert the positive and negative wires into the V+ and V- contacts.
2. Tighten the wire-clamp screws to prevent the DC wires from being loosened.



Go to *RocketLinX ES7528 configuration* to configure the network information and RocketLinX ES7528 features.

RocketLinX ES7528 Configuration

You can configure the RocketLinX ES7528 network information (IP address, subnet mask, and gateway or DHCP) using one of the following methods:

- ▶ NetVision
- ▶ Web browser
- ▶ Command Line Interface (CLI) using one of these methods:
 - Serial console port by connecting the RS-232 console cable that was shipped with the RocketLinX ES7528 to a system COM port
 - Telnet
 - Secure shell (SSH)

The default IP address of the RocketLinX ES7528 is **192.168.250.250**.

This document discusses using NetVision to program the network information into the ES7528 and a web browser to begin feature configuration. You can refer to the *RocketLinX ES7528 User Guide*, if you want to use one of the other configuration methods.

1. If necessary, install the latest version of the Java Runtime Environment on your PC.

Note: *NetVision is available on the RocketLinX Software and Documentation CD or you can download the latest version from the Control ftp site.*

2. Copy the NetVision application to a host system with a Windows operating system. Make sure that you note the location as there is no installation wizard or process for NetVision.

3. Start NetVision.
4. Configure the RocketLinx ES7528 IP address for your network.
 - a. In NetVision, click the **Discovery** button. After five seconds the RocketLinx ES7528 should be listed.
 - b. Highlight the RocketLinx ES7528.
 - c. To configure a static IP address, double-click the **IP Address** field and enter a desired IP address.
 - d. Double-click the **Netmask** field and enter a desired subnet mask.
 - e. Select the **IP Settings/Modify IP** menu item to commit the IP address and Netmask change to the RocketLinx ES7528 switch.
 - d. Open a web browser and enter the IP address of the RocketLinx ES7528.
For example: **http://192.168.250.250** or **https://192.168.250.250**.
6. Click **Run** when Java prompts you to run the applet.
7. Enter **admin** for both the user name and the password when prompted.
You can refer to the *RocketLinx ES7528 User Guide* or help system for detailed feature configuration information.

Control Customer Service

Contact Method	Web Address or Phone Number
Support	http://www.comtrol.com/pub/en/support
Downloads	ftp://ftp.comtrol.com/html/ES7528_main.htm
Web Site	http://www.comtrol.com
Phone	763.957.6000

